



**KEYSTONE CEMENT COMPANY**  
P.O. BOX A, BATH, PA 18014-0058 TELEPHONE (610) 837-1881



EFACS: 2420664

January 29, 2015

Mr. Mark J. Wejksznar, P.E.  
Regional Air Quality Program Manager  
Pennsylvania Department of Environmental Protection  
2 Public Square  
Wilkes-Barre, PA 18701-0790

Ms. Diana Escher, Director  
Air Protection Division  
USEPA, Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029

AIR QUALITY

JAN 30 2015

FACILITY: \_\_\_\_\_  
PERMIT #: \_\_\_\_\_  
COUNTY: \_\_\_\_\_  
FILE CODE: \_\_\_\_\_

Re: *Submittal of §63.10(d)(5)  
Periodic Startup, Shutdown, and Malfunction Report  
For Units Subject to 40 CFR 63 Subpart LLL  
For the period of July 01, 2014 through December 31, 2014  
Keystone Cement Company, Bath, Pennsylvania*

RECEIVED

FEB 03 2015

BETHLEHEM DISTRICT OFFICE  
PA DEP

Dear Mr. Wejksznar and Ms. Escher:

Keystone Cement Company Bath, PA facility (Keystone) is submitting the enclosed periodic startup, shutdown, and malfunction (SSM) report for emission units subject to the requirements of 40 CFR 63 Subpart LLL – National Emissions Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry. Keystone is submitting this report for the semi-annual period from July 01, 2014 through December 31, 2014 in accordance with the requirements of 40 CFR §63.10(d)(5)(i). Pursuant to these requirements, a periodic SSM report is only required if a startup, shutdown, or malfunction (SSM event) caused the affected source to exceed the emission standards in §63.1344(a).

***Keystone experienced SSM events for the units subject to emission standards in §63.1344(a) during the reporting period and is submitting this periodic SSM report in accordance with the requirements of §63.10(d)(5)(i).***

If a periodic SSM report is required, the regulation specifies that the following information must be included:

- If actions taken by an owner or operator during a startup or shutdown (and the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards), or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan (SSM Plan), the owner or operator must state such information in a startup, shutdown, and malfunction report. If actions taken by the owner or operator

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RT. 329, BATH, PA 18014-0058  
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during SSM events were consistent with the procedures specified in the source's SSM Plan the owner or operator must state such in the periodic SSM report.

***For each SSM event that occurred during the reporting period Keystone followed the procedures specified in the facility's SSM Plan.***

- The number, duration, and a brief description of each type of malfunction which occurred during the reporting period and which caused or may have caused an emission limit to be exceeded must be included.

***A summary table of the malfunction that occurred during the reporting period where excess emissions may have resulted is attached. As previously stated, Keystone followed the procedures specified in the SSM Plan for all of the malfunction events.***

Records of all startup and shutdown events, as well as malfunction events that caused excess emissions are maintained on-site as part of the facility operating record and are available for inspection. If you have any questions or require any addition information regarding this submittal please contact Jeffery W. Smith, P.E. at (610) 837-1881 ext. 3213 or at [Jeffery.Smith@gcpv.com](mailto:Jeffery.Smith@gcpv.com).

By signing this letter, I certify that I am a responsible official as that term as defined 40 CFR §63.2. I further certify, based on reasonable inquiry that the enclosed report is to the best of my knowledge and belief true, accurate, and complete.

Sincerely,



Stephen P. Holt, P.E.  
Vice President, Environmental Compliance

Enclosures

cc: Jeffery W. Smith, P.E., Keystone

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**ATTACHMENT A -  
PERIODIC SSM REPORT**

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# PERIODIC SSM REPORT

Reporting Period: July 01, 2014 - December 31, 2014

Contact Person: Jeffery W. Smith, P.E.  
 Manager, Environmental Compliance  
 Keystone Cement Company  
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 P.O. Box A  
 Bath, PA 18014-0058  
 Phone: (610) 837-1881 ext. 3213

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 FEB 03 2015  
 BETHLEHEM DISTRICT OFFICE  
 PA DEP  
 AIR QUALITY  
 JAN 30 2015  
 FACILITY: \_\_\_\_\_  
 PENN. #: \_\_\_\_\_  
 COUNTY: \_\_\_\_\_  
 FILE CODE: \_\_\_\_\_

Actions taken during this reporting period in response to excess emission events caused by a malfunction were consistent with the SSM Plan. These events are listed below in Table 1.

TABLE 1 - STARTUP, SHUTDOWN, AND MALFUNCTIONS WHERE SSM PLAN WAS FOLLOWED

Date	Subject Unit	Parameter	Description	Duration (min)	Corrective Action
7/9/2014	Raw Material System Conveyors & Elevators	Visible Emissions	Dusting from Raw Mill bleed air damper (321-LD-02) for short periods of time. Incident occurred during preheating of the Raw Mill when automatic adjustments of the Main ID Fan were made to address increased exhaust temperatures. Short term spikes in temperature resulted in damper adjustments and positive pressure within the Raw Mill air intake.	5	Control Room Operator made adjustments to system dampers and main baghouse ID Fan to adjust Raw Mill temperature and inlet pressure returning to negative pressure.
7/12/2014	Clinker Transfer Silo Load Out	Visible Emissions	During confirmation of operation of load out system, the bottom of clinker load out tank choked within the screw conveyor. In process of inspecting the material jam, the door to the conveyor was removed - inadvertently allowing a large amount of material to discharge from the silo.	30	Spilled clinker was cleaned up and jammed material jack-hammered out between screws. Adjustments made to load out spout to provide for better control.
7/14/2014	Raw Meal Air Slide & Elevator	Fugitive Emissions	Raw Mill air slide blockage during startup/shutdown causing localized fugitive emissions from Raw Mill area.	10	Relieved pressure on bleed air damper/blower (321-BL-01) and cleaned out airslide. Returned to normal operation.
7/28/2014	Raw Material System Conveyors & Elevators	Opacity	Shutdown of raw mill system due to ID fan failure (321-FN-03). Incident resulted in visible emissions of ~ 20% opacity from the raw mill system for a short period of time.	<5	System was immediately recovered and returned to normal operation - eliminating the positive pressure condition.
7/29/2014	Finish Material Bins, Conveyors, and Feeders	Visible Emissions	Shift Supervisor observed visible emissions (>10%) from stack of the malfunctioning control device (512-BF-06).	3	Associated finish mill system and control device immediately shutdown. Maintenance work order (WO #233487) issued / staff contacted to complete inspection. Unit returned to operation following inspection/repair.
7/29/2014	Raw Meal Air Slide & Elevator	Visible Emissions	The kiln feed bucket elevator experienced a malfunction resulting from a motion sensor trip. This triggering event put the pre-heater/precalciner and kiln into an immediate shutdown status therefore the system ceased the operation of the main ID fan which in turn created a positive pressure condition. This positive pressure resulted in visible emissions from the calciner tower for a period of ~10 minutes with elevated levels of opacity.	10	Operations Department staff immediately took action and initiated a maintenance work order. Completion of the work order discovered a faulty motion switch, which was repaired.

**TABLE 1 - STARTUP, SHUTDOWN, AND MALFUNCTIONS WHERE SSM PLAN WAS FOLLOWED**

Date	Subject Unit	Parameter	Description	Duration (min)	Corrective Action
8/4/2014	Raw Material Storage System and Homogenizing Silo	Emissions	Upon taking down the discharge air slide from the bucket elevator for repairs, raw meal dropped out causing localized emissions.	5	Being that the incident occurred during maintenance activities, it is believed more thorough planning and execution of such maintenance, including removal of residual dust prior to disconnect of equipment, will eliminate any future issues.
8/14/2014	Raw Meal Air Slide & Elevator	Visible Emissions	Three (3) air slide choke incidents were experienced during Raw Mill startup. Each incident was of short duration that resulted in visible emissions from elevator boot (341-BE-01).	45	Blew down/cleaned material from various sections until such time as material moved through the air slide - clearing system and eliminating emissions.
10/15/2014	Clinker Cooler	Opacity	CRO initiated procedures to cool down tower, causing the Clinker Cooler ID fan to rapidly increase and result in excess opacity from the clinker cooler baghouse.	66	Inspection of the baghouse and bag replacement.
10/16/2014	Clinker Cooler	Opacity	CRO initiated procedures to cool down tower, causing the Clinker Cooler ID fan to rapidly increase and result in excess opacity from the clinker cooler baghouse.	30	Inspection of the baghouse and bag replacement.